



Congenital anomalies non compatible with life delivered at term in a tertiary care hospital in tribal population: A case series

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Abstract:

Background: Congenital anomalies or birth defects are the conditions present at birth which may cause maldevelopment of fetus physically or mentally in utero or after birth or some of these may be incompatible with life. [1] Out of these fatal anomalies some may lead to abortions, intrauterine death and others may lead to neonatal death. Ideally these type of fatal anomalies should be detected in late first trimester or second trimester anomaly ultrasound scan and should be aborted in first or second trimester itself. Shahdol is one of the tribal district of Madhya Pradesh where around 44.65% population belongs to Scheduled tribes and this district is India's one of the most backward districts [2][3]. In this area patients do not undergo even a single ultrasound scan in any of the trimester of pregnancy because of financial constraints and several myths because of which patient delivers such fatally anomalous babies at term or may undergo unnecessary cesarean section which leaves the family with immense grief and compromises the physical as well as mental health of the mother. We are presenting a case series of 10 such cases delivered in our tertiary care hospital in a span of 1 year.

Case series:

In our tertiary care hospital in one year total of 4642 deliveries occurred and out these 29 were congenitally anomalous and out of these 29 fetuses 10 anomalies were incompatible with life.

| S.No. | Maternal age in years | Parity | Belongs to tribal population | Gestational age | History of periconceptional folic acid | History of teratogenic drug or radiation exposure in antenatal period | Number of ultrasonography in pregnancy | Previous history of anomalous babies | Mode of delivery | Provisional Diagnosis of baby | Indication for LSCS |
|-------|-----------------------|--------|------------------------------|-----------------|--|---|--|--|-------------------------|---|---|
| 1 | 25 | Primi | Yes | 37 weeks | No | No | 1 at 36 weeks 4 days | No | Vaginal delivery | Holoprosencephaly | |
| 2 | 28 | G2P1 | Yes | 40 weeks | No | No | Nil | No | LSCS | Anencephaly with meningomyelocele | Previous Cesarean section with fetal distress |
| 3 | 28 | Primi | No | 37 weeks | No | No | Nil | No | Vaginal delivery | Anencephaly | |
| 4 | 22 | G3P2 | Yes | 41 weeks | No | No | Nil | Yes previous 1 history of spina bifida | Vaginal delivery | Anencephaly | |
| 5 | 31 | G2P1 | No | 38 weeks | No | No | 1 in 38 weeks | No | LSCS | Bilateral Polycystic kidney disease with gross hydronephrosis | Non progress of labour |
| 6 | 25 | Primi | No | 38 weeks | No | No | Nil | No | LSCS | Encephalocele with hydrocephalus | Breech |
| 7 | 20 | Primi | No | 39 weeks | No | No | Nil | No | LSCS | Frontal encephalocele with spina bifida | Fetal distress |
| 8 | 30 | G2P1 | Yes | 37 weeks | No | No | Nil | No | Vaginal breech delivery | Anencephaly with gastroschisis | |
| 9 | 19 | Primi | Yes | 38 weeks | No | No | Nil | No | LSCS | Gastroschisis with gangrenous bowel | Fetal distress |
| 10 | 28 | Primi | No | 43 weeks | No | No | Nil | No | LSCS | Anencephaly | Footling breech |

1)



3)



4)



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6)

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8)





Discussion: Globally 2-3% of the babies born are congenitally anomalous [4]. In India every year around 421,652 to 522,676 babies born have one or the other congenital anomaly. Among these anomalies neural tubal defects are most common and anencephaly is the most frequently reported anomaly among neural tubal defects [5]. Majority of the neural tubal defects are non compatible with life or highly debilitating. A reassuring thing about these anomalies are that they are totally preventable by taking folic acid tablets in periconceptional period and it is made available by Government of India free of cost in all health care facilities. Main problem in India is that most of the pregnancies are unplanned because of which periconceptional period of taking folic acid is almost missed. Some of these anomalies like anencephaly and acrania can be detected even in NT/NB Scan performed at 11-13 weeks [6] and majority are detected in Anomaly scan at 18-22weeks to nobut because of lack of awareness, low income and ignorance antenatal women do not get any anomaly ultrasonography done and many a times women even do not get a single sonography in entire pregnancy. So these types of anomalies which was supposed to be detected in first trimester or early second trimester, remains undetected till term or even detected after birth which leads to unnecessary operative interventions and breaks the woman and her family both physically and mentally. These types of problem of unawareness and ignorance are more pronounced in tribal areas. To prevent these type of anomalies and their consequences education and awareness is must. ASHA and primary health care workers should be strengthened to provide folic acid tablets in periconceptional period and every pregnancy should be planned.

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